



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/698,586	10/27/2000	Jacob Wohlstadter	W0538/7003 TJO	3464
7590	10/11/2005		EXAMINER	
Timothy J Oyer Wolf Greenfield & Sacks PC 600 Atlantic Avenue Boston, MA 02210			DASS, HARISH T	
			ART UNIT	PAPER NUMBER
			3628	

DATE MAILED: 10/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/698,586	WOHLSTADTER, JACOB	
	<b>Examiner</b>	<b>Art Unit</b>	
	Harish T. Dass	3628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 5/2/2005.

2a) This action is FINAL.                    2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-112 is/are pending in the application.

4a) Of the above claim(s) 3-7 and 9-92 is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1,2, 8 and 93-112 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

1. Certified copies of the priority documents have been received.

2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 101***

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-2 and 8 remain rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

As an initial matter, the United States Constitution under Art. I, §8, cl. 8 gave Congress the power to "[p]romote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries". In carrying out this power, Congress authorized under 35 U.S.C. §101 a grant of a patent to "[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition or matter, or any new and useful improvement thereof." Therefore, a fundamental premise is that a patent is a statutorily created vehicle for Congress to confer an exclusive right to the inventors for "inventions" that promote the progress of "science and the useful arts". The phrase "technological arts" has been created and used by the courts to offer another view of the term "useful arts". See *In re Musgrave*, 167 USPQ (BNA) 280 (CCPA 1970). Hence, the first test of whether an invention is eligible for a patent is to determine if the invention is within the "technological arts".

Further, despite the express language of §101, several judicially created exceptions have been established to exclude certain subject matter as being patentable subject matter covered by §101. These exceptions include "laws of nature", "natural phenomena", and "abstract ideas". See *Diamond v. Diehr*, 450, U.S. 175, 185, 209 USPQ (BNA) 1, 7 (1981). However, courts have found that even if an invention incorporates abstract ideas, such as mathematical algorithms, the invention may nevertheless be statutory subject matter if the invention as a whole produces a "useful, concrete and tangible result." See *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* 149 F.3d 1368, 1973, 47 USPQ2d (BNA) 1596 (Fed. Cir. 1998).

This "two prong" test was evident when the Court of Customs and Patent Appeals (CCPA) decided an appeal from the Board of Patent Appeals and Interferences (BPAI). See *In re Toma*, 197 USPQ (BNA) 852 (CCPA 1978). In *Toma*, the court held that the recited mathematical algorithm did not render the claim as a whole non-statutory using the Freeman-Walter-Abele test as applied to *Gottschalk v. Benson*, 409 U.S. 63, 175 USPQ (BNA) 673 (1972). Additionally, the court decided separately on the issue of the "technological arts". The court developed a "technological arts" analysis:

The "technological" or "useful" arts inquiry must focus on whether the claimed subject matter...is statutory, not on whether the product of the claimed subject matter...is statutory, not on whether the prior art which the claimed subject matter purports to replace...is statutory, and not on whether the claimed subject matter is presently perceived to be an improvement over the prior art, e.g., whether it "enhances" the operation of a machine. *In re Toma* at 857.

In Toma, the claimed invention was a computer program for translating a source human language (e.g., Russian) into a target human language (e.g., English). The court found that the claimed computer implemented process was within the "technological art" because the claimed invention was an operation being performed by a computer within a computer.

The decision in State Street Bank & Trust Co. v. Signature Financial Group, Inc. never addressed this prong of the test. In State Street Bank & Trust Co., the court found that the "mathematical exception" using the Freeman-Walter-Abele test has little, if any, application to determining the presence of statutory subject matter but rather, statutory subject matter should be based on whether the operation produces a "useful, concrete and tangible result". See State Street Bank & Trust Co. at 1374. Furthermore, the court found that there was no "business method exception" since the court decisions that purported to create such exceptions were based on novelty or lack of enablement issues and not on statutory grounds. Therefore, the court held that "[w]hether the patent's claims are too broad to be patentable is not to be judged under §101, but rather under §§102, 103 and 112." See State Street Bank & Trust Co. at 1377. Both of these analysis goes towards whether the claimed invention is non-statutory because of the presence of an abstract idea. Indeed, State Street abolished the Freeman-Walter-Abele test used in Toma. However, State Street never addressed the second part of the analysis, i.e., the "technological arts" test established in Toma because the invention in State Street (i.e., a computerized system for determining the year-end income, expense, and capital gain or loss for the portfolio) was already determined to be within

Art Unit: 3628

the technological arts under the Toma test. This dichotomy has been recently acknowledged by the Board of Patent Appeals and Interferences (BPAI) in affirming a §101 rejection finding the claimed invention to be non-statutory. See *Ex parte Bowman*, 61 USPQ2d (BNA) 1669 (BdPatApp&Int 2001).

In the present application, Claims 1-2 and 8 have no connection to the technological arts. None of the steps indicate any connection to a computer or technology. Therefore, the claims are directed towards non-statutory subject matter. To overcome this rejection the Examiner recommends that Applicant amend the claims to better clarify which of the steps are being performed within the technological arts; for example: "computer is used to calculate average ..."

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2 and 8, 93-108, are rejected under 35 U.S.C. 103(a) as being unpatentable over Buist (US 6,408,282) in view of Fenster "Community By Covenant, Process, And

Design: Cohousing And The Contemporary Common Interest Community", 1999 {sited in [www.law.fsu.edu/journals/landuse/vol151/fenster1.htm](http://www.law.fsu.edu/journals/landuse/vol151/fenster1.htm).} (hereinafter Fenster).

Re. Claims 1-2, 8, 93-94, 106-107 Buist discloses a system and method of the preferred embodiment supports trading of securities over the Internet both on national exchanges and outside the national exchanges [see entire document particularly],

consummating by a first party and a second party a transaction in the security, the first party and the second party being distinct from the entity [Abstract; Figures 1-10; Col. 1 line 5 to Col. 4 line 12], and

selling the security by a first party to a second party, the first and second parties being distinct entities from the issuing entity [Abstract; Figures 1-10; Col. 1 line 5 to Col. 4 line 12] and computer system [Figure 1-2].

Buist does not explicitly disclose paying a royalty on the transaction to the entity, wherein the step of paying a royalty on the transaction is performed by at least one of the first party and the second party and

paying a royalty on the sale of the security to the entity that issued the security.

However, FENSTER, discloses these steps (see entire document of 45 pages, particularly page 2 "Community By Design"; page 5 4th paragraph, and page 14 4<sup>th</sup> paragraph "Alienability of Shares" ... where EVCC was incorporated in May 1995 ... setting a "present" rate at 20% of net gain, reduced by expenses of sale ... – royalty or fees, see fees and charges) to recaptured some of the increasing value in security (share of Co-Op) that the entity was helping to create. It would have been obvious at the

Art Unit: 3628

time the invention was made to a person having ordinary skill in the art to combine the disclosures of Buist and FENSTER to make the seller to pay some percent of the earning as a royalty (or pay a transfer fee or "flip tax") that the entity helping to creating.

Re. Claim 95, Fenster further wherein said royalty is at least a portion of a difference between a first price at which said first party sells said security (shares of Co-Op) and a second price at which said second party buys said security.

Re. Claim 96 and 97, neither Buist or Fenster explicitly discloses wherein the entity does not participate in the step of operating a computer system to consummate the transaction and wherein the first party and the second party interact directly to consummate said transaction. However these are business choices. for example, buyer and sell directly deal with each other or go through a third party such as real estate broker or co-op management who is responsible for managing the co-op for investors. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the disclosure of Buist and Fenster and include the above steps to provide more choices to make a deal and bring profit to co-op investors.

Re. Claim 98, Buist discloses wherein said transaction is a sale by the first entity to the second entity of said security and operating a computer system to consummate said sale transaction includes operating said computer system. neither Buist nor Fenster discloses collect a purchase price payment from the second entity and deliver a selling

Art Unit: 3628

price payment to the first entity However, these steps are well known in real estate (selling/buying co-op) where the attorney or closing agent collect the payment from buyer and delivers it to seller. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the disclosure of Buist and Fenster and include the above steps to make assure the deal is proper and no fraud or legal problem exists.

Re. Claim 99-100 and 108, Buist discloses wherein operating a computer system to consummate a transaction includes the first party having a first client and the computer system obtaining from the first client an instruction requesting the first party to purchase the security or sell the security, and the first party is not said entity and wherein operating a computer system to consummate a transaction includes operating said computer system to: receive a first instruction from the first party to purchase at least one said security; receive a second instruction from the second party to sell said at least one said security; receive other instructions from those or other parties to purchase or sell other securities; match the first instruction with the second instruction to execute a transaction in said at least one said security, wherein the first party and second party are distinct from the entity [see Figure 3 flow chart; C4 L43-55; C6 L62 to C7 L55; C8 L63 to C9 L9; C9 42-L61 – where ticket is instruction].

Re. Claims 101-103, Fenster father discloses pay a royalty on the transaction to the entity includes determining if the transaction is a royalty generating transaction, wherein

Art Unit: 3628

the royalty is at least one of a percentage of a fee received by an exchange [page 5 4th paragraph, and page 14 4<sup>th</sup> paragraph]. Neither Buist nor Fenster discloses a portion of a fee charged by an intermediary, and a portion of an increase in value of the security since it last was purchased or sold and wherein the intermediary is at least one of a market maker and a broker. However, determining the fee to broker/agents as a percentage of sale and the calculating the increase value and market makers are well known. For example, real estate broker company or broker firm get its commission, the agent of the broker company gets his portion and increase value is calculated for tax purpose and for co-op charges. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the disclosures of Buist and Fenster and add the calculation of the fees and charge to be done by computer automatically.

Re. Claims 104-105, neither Buist nor Fenster does not explicitly disclose wherein operating a computer system to determine and pay a royalty on the transaction to the entity includes debiting an account on behalf of the entity to collect the royalty, and transferring the royalty to an account maintained on behalf of the entity. However these are design choices that how to pay or whom to pay. For example, a individual (buyer/seller) who has an account with a brokerage firm will do business using the account for debiting and crediting the amount of trade where the account is managed by broker or a third party (bank).

Claims 109-112 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buist and Fenster, as applied to claim 106 above, further in view of Bowman-Amual (US 6,697,824).

Re. Claims 109-112, Buist discloses wherein the set of exchange instructions is configured to match buy and sell orders [see Figure 3 flow chart; C4 L43-55; C6 L62 to C7 L55; C8 L63 to C9 L9; C9 42-L61]. Fenster further discloses paying fees (royalty), and wherein the transaction involves a transfer of rights other than title in the security. Neither Buist nor Fenster explicitly discloses calculation instructions constructed and arranged, when so executed, to calculate royalties owed to issuing entities of the securities involved in the transactions and wherein the set of exchange instructions is configured to run autonomously on the computer to enable transactions to occur without the intervention of a human operator. However, wherein the transaction involves a transfer of rights other than title in the security is well known. For example, the property title is transferred in real estate transaction and similarly the security certificate is transferred to new owner to entitle the new owner the ownership of the real estate or security. Bowman-Amual discloses these features [C1 L20-L28; C4 L45 to C5 L53; C61 L48 to C62 L12; C62 L52 to C64 L43] to allow the computer software do verity of business calculations with out interference of user to automate the process. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify disclosure of Buist and Fenster and include computer instruction to

automatically make business calculations to save cost and enhance the accuracy of calculation.

***Response to Arguments***

3. Applicant's arguments with respect to claims 1-2 and 8 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

4. In response to this office action Applicant must add a statement that no new matter is added which was not disclosed in original disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harish T. Dass whose telephone number is 571-272-6793. The examiner can normally be reached on 8:00 AM to 4:50 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung S. Sough can be reached on 571-272-6799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3628

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Harish T Dass  
Examiner  
Art Unit 3628

10/2/05



HYUNG SOUGH  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600